CLAIMS

WHAT IS CLAIMED IS:

1. A method for treating the metabolic syndrome or Type 2 diabetes in a patient, comprising the step of increasing the ratio of dopaminergic neuronal to noradrenergic neuronal activity within the hypothalamus of the central nervous system of said patient.

2. A method for treating the metabolic syndrome or Type 2 diabetes, comprising the step of:

administering to a subject in need of such treatment a pharmaceutical composition comprising (1) at least one compound that stimulates an increase in central dopaminergic neuronal activity level in said subject, and (2) at least one compound that stimulates a decrease in central noradrenergic neuronal activity level in said subject.

3. The method of claim 2, wherein said increase in central dopaminergic neuronal activity level occurs within neurons innervating the hypothalamus and the hypothalamus itself.

4. The method of claim 2, wherein said at least one compound that stimulates an increase in central dopaminergic neuronal activity level is selected from the group consisting of dopamine reuptake inhibitor compounds, dopamine presynaptic transporter inhibitor compounds, presynaptic dopamine release enhancer compounds, post synaptic dopamine receptor agonist compounds, dopamine synthesis stimulator compounds, dopamine catabolism inhibitor compounds, and combinations thereof.

5. The method of claim 2, wherein said at least one compound that stimulates an increase in central dopaminergic neuronal activity level is selected from the group consisting of GBR-12935, BDNF, quinpirole, SKF38393, deprenyl, apomorphine, pramipexole, GBR-12909, and combinations thereof.

6. The method of claim 2, wherein said decrease in central noradrenergic neuronal activity level occurs within the brain stem region that innervates the hypothalamus and the hypothalamus itself.

7. The method of claim 2, wherein said at least one compound that stimulates a decrease in central noradrenergic neuronal activity level is selected from the group consisting of postsynaptic noradrenergic receptor blockade compounds, inhibitors of noradrenalin release, inhibitors of noradrenalin synthesis, activators of noradrenalin presynaptic reuptake, and activators of noradrenalin catabolism presynaptically and in the synapse, and combinations thereof.

8. The method of claim 2, wherein said at least one compound that stimulates a decrease in central noradrenergic neuronal activity level is selected from the group consisting of prazosin, propranolol, clonidine, fusaric acid, dopamine, phenoxybenzamine, phentolamine, guanfacine, and combinations thereof.

9. The method of claim 2, wherein the ratio of said at least one compound that stimulates an increase in central dopaminergic neuronal activity level to said at least one compound that stimulates a decrease in central noradrenergic neuronal activity level in said pharmaceutical composition ranges from about 500:1 to 1:500 on a weight-to-weight (w:w) basis.

10. The method of claim 2, wherein the ratio of said at least one compound that stimulates an increase in central dopaminergic neuronal activity level to said at least one compound that stimulates a decrease in central noradrenergic activity level in said pharmaceutical composition ranges from about 100:1 to 1:100 on a weight-to-weight (w:w) basis.

11. A method for treating the metabolic syndrome or Type 2 diabetes, comprising the step of:

administering to a subject in need of such treatment a pharmaceutical composition comprising at least one compound that simultaneously stimulates (1) an increase in central dopaminergic neuronal activity level, and (2) a decrease in central noradrenergic neuronal activity level.

12. The method of claim 11, wherein said increase in central dopaminergic neuronal activity level occurs within neurons innervating the hypothalamus and the hypothalamus itself.

13. The method of claim 11, wherein said decrease in central noradrenergic neuronal activity level occurs within the brain stem region that innervates the hypothalamus and the hypothalamus itself.

14. The method of claim 11, wherein said compound is selected from the group consisting of catecholamine modifiers.

15. A pharmaceutical composition effective for treating the metabolic syndrome or Type 2 diabetes, said composition comprising:

(1) at least one central dopaminergic neuronal activity activator;

(2) at least one central noradrenergic neuronal activity inhibitor; and

(3) a pharmaceutically acceptable carrier.

16. The pharmaceutical composition of claim 15, wherein said at least one central dopaminergic neuronal activity activator is selected from the group consisting of GBR-12935, BDNF, quinpirole, SKF38393, deprenyl, apomorphine, pramipexole, GBR-12909, and combinations thereof.

17. The pharmaceutical composition of claim 15, wherein said at least one central noradrenergic neuronal activity inhibitor is selected from the group consisting of prazosin, propranolol, clonidine, fusaric acid, dopamine, phenoxybenzamine, phentolamine, guanfacine, and combinations thereof.

18. The pharmaceutical composition of claim 15, wherein the ratio of said at least one central dopaminergic neuronal activity activator to said at least one central noradrenergic neuronal activity inhibitor ranges from about 500:1 to 1:500 on a weight-to-weight (w:w) basis.

19. The pharmaceutical composition of claim 15, wherein the ratio of said at least one central dopaminergic neuronal activity activator to said at least one central noradrenergic neuronal activity inhibitor ranges from about 100:1 to 1:100 on a weight-to-weight (w:w) basis.

20. A pharmaceutical composition effective for treating the metabolic syndrome or Type 2 diabetes, said composition comprising

at least one compound that simultaneously stimulates (1) an increase in central dopaminergic neuronal activity level, and (2) a decrease in central noradrenergic neuronal activity level, said compound selected from the group consisting of catecholamine modifiers and

a pharmaceutically acceptable carrier.